

REMARKS

Applicant confirms the telephone election without traverse of the invention of claims 1-25 for examination in the present patent application. Non-elected claims 26-36 are canceled.

Claims 1-36 were pending in the above-identified application when last examined and are amended as indicated above. The claim amendments clarify the claim language and are not intended to limit the scope of the claims, unless the claim language is expressly quoted in the following remarks to distinguish over the art cited.

Claims 1-4, 6, 7, 10, 12, and 14-18 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Pat. No. 5,974,380 (Smyth). Applicant respectfully traverses the rejection.

Independent claim 1 distinguishes over Smyth by reciting, “a first audio channel representing an audio portion of the presentation after time scaling by a first time scale factor; and a second audio channel representing the audio portion after time scaling by a second time scale factor that differs from the first time scale factor.” Smyth fails to disclose or suggest time scaling or audio channels having different time scale factors.

In regard to audio channels representing audio after scaling by respective time scale factors the Examiner cited column 14, lines 14-33 of Smyth. The cited portion of Smyth refers to Figs. 12A and 12B and describes encoding an average of the high-frequency subbands for separate audio channels that have similar responses at high frequencies. In regards to scaling, Smyth starting at column 14, line 23 states that “The decoder reconstructs the signal in the designated channel and then copies it to each of the other channels. Each channel is then scaled in accordance with its particular RMS scale factor.” Accordingly, Smyth describes using RMS (Root Mean Square) scale factors. RMS scale factors can be used to scale the amplitude of digitally encoded audio channels to provide higher fidelity when the volume is low. Smyth fails to disclose or suggest time scaling or audio channels representing audio after time scaling.

Claim 1 and claims 2, 4, 6, 7, and 10, which depend from claim 1, are thus patentable over Smyth.

Independent claim 12 distinguishes over Smyth by reciting, a “data structure

comprising a plurality of audio channels representing the audio presentation after time scaling, wherein: each audio channel has a corresponding time scale factor.” As noted above, Smyth fails to disclose or suggest “audio channels representing the audio presentation after time scaling,” but instead is directed to digital audio encoding/decoding that uses RMS or amplitude scaling to reduce distortion caused by quantizing amplitudes. Accordingly, claim 12 and claim 13, which depends from claim 12, are patentable over Smyth.

Independent claim 14 distinguishes over Smyth at least by reciting, “performing a plurality of time scaling processes on the audio data to generate a plurality of time-scaled audio data sets, each time-scaled audio data set having a different time scale factor.” Smyth is not directed to and does not suggest time scaling of audio. Accordingly, claim 14 and claims 15-18, which depend from claim 14, are patentable over Smyth.

For the above reasons, Applicant requests reconsideration and withdrawal of this rejection under 35 U.S.C. § 102.

Claims 19, 22, and 23 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Pat. No. 5,664,044 (Ware). Applicant respectfully traverses the rejection.

Independent claim 19 distinguishes over Ware at least by reciting, “loading a first audio frame . . . representing a first portion of the presentation after scaling by a first time-scaling factor, wherein the first audio frame has a first channel index value that identifies the first audio frame as being scaled by the first time scaling factor; playing the first audio frame . . . ; receiving a request to change playing from the first time scaling factor to a second time scaling factor; requesting from the source a second audio frame that has a second channel index value that identifies the second audio frame as being scaled by the second time-scaling factor; and playing the second audio frame after the first audio frame to provide a real-time change in the time-scale of the presentation.” Ware fails to disclose or suggest a first frame having a first channel index value that identifies the frame as being scaled by a first time scaling factor and a second audio frame that has a second channel index value that identifies the second audio frame as being scaled by the second time-scaling factor.

In regard to claim 19, the Examiner cited Fig. 1 and column 5, line 55 to column 6, line 30 of Ware. Ware beginning at column 6, line 6 describes the process of Fig. 1 as follows: “Initially, at least two frames of audio and two frames of video are placed in separate audio and video buffers at 101. . . . A time domain harmonic scaling factor, C, . . . is then set equal to RV at 102. At 104 of FIG. 1, the time T required to playback an audio frame with

the established scaling factor is calculated ... A video frame is then taken from the video buffer, decoded, and displayed on the display device for T seconds at 105. Simultaneously at 106, an audio frame is taken from the audio buffer, decoded, and played using the time domain harmonic scaling method with scaling factor C.” Accordingly, Ware discloses a system in which a frame of unscaled audio data is loaded (step 101) before the scaling factor C is set (step 102), and Ware performs scaling as the audio is played. Ware provides no indication or suggestion of frames having channel index values that identify a time-scaling factor.

In accordance with an aspect of the invention, a system with low processing power can achieve near real-time changes in time scale by accessing pre-scaled audio frames from channels having channel indices that identify the time scale associated with the channel. In contrast, Ware discloses a system that uses the same data regardless of the time scale and performs on-the-fly time scaling. Accordingly, Ware does not suggest (or need) channel index values that are used as recited in claim 19.

Claim 19 and claims 22 and 23, which depend from claim 19 are thus patentable over Ware.

Claims 22 and 23 further distinguish over Ware by reciting, “channel index values of frames further indicate respective compression processes for the frames.” Ware provides no suggestion of a channel index value indicating a compression process.

For the above reasons, Applicant requests reconsideration and withdrawal of this rejection under 35 U.S.C. § 102.

Claims 11 and 13 were rejected under 35 U.S.C. § 103(a) as unpatentable over Smyth. Applicant respectfully traverses the rejection.

Claims 11 and 13 respectively depend from independent claims 1 and 12. Claims 11 and 13 are therefore patentable over Smyth for at least the same reasons that claims 1 and 12 are patentable over Smyth.

For the above reasons, Applicant requests reconsideration and withdrawal of this rejection under 35 U.S.C. § 103.

Claims 5, 8, and 9 were rejected under 35 U.S.C. § 103(a) as unpatentable over Smyth in view of U.S. patent No. 5,995,091 (Near). Applicant respectfully traverses the rejection.

Claims 5, 8, and 9 depend from claim 1, which is patentable over Smyth at least for

the reasons given above. In particular, Smyth fails to disclose or suggest time scaling or audio channels representing audio after time scaling. The Examiner cites Near for teaching a “data structure further comprises a data channel identifying graphics associated with the audio presentation … and a server connected to a network.” See paragraph 22 of the Office Action. However, such teaching of Near does not provide or suggest the elements of claim 1 that are missing from Smyth. Accordingly, claims 5, 8, and 9 are patentable over the combination of Smyth and Near at least because the combination fails to suggest “a first audio channel representing an audio portion of the presentation after time scaling by a first time scale factor; and a second audio channel representing the audio portion after time scaling by a second time scale factor that differs from the first time scale factor” as recited in claim 1.

Applicant therefore requests reconsideration and withdrawal of this rejection under 35 U.S.C. § 103.

Claims 20 and 21 were rejected under 35 U.S.C. § 103(a) as unpatentable over Ware in view of Smyth. Applicant respectfully traverses the rejection.

Claims 20 and 21 depend from claim 19, which is patentable over Ware for at least the reasons given above. In particular, Ware fails to disclose or suggest frames having channel index values that identify respective scaling factors. Smyth similarly fails to suggest the recited relation of channel index values and time scaling factors in claim 19 because Smyth fails to suggest time scaling. Accordingly, claim 19 and claims 20 and 21 are patentable over the combination of Ware and Smyth.

For the above reasons, Applicant requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103.

Claims 24 and 25 were rejected under 35 U.S.C. § 103(a) as unpatentable over Ware in view of U.S. patent No. 5,886,276 (Levine). Applicant respectfully traverses the rejection.

Independent claim 24 patentably distinguishes over the combination of Ware and Levine at least by reciting, “playing an audio presentation on a receiver that is connected via a network to a source storing a multi-channel data structure representing the audio presentation, the method comprising: determining available bandwidth on the network; selecting a first channel of the multi-channel data structure from a plurality of channels that represent the audio presentation after time-scaling by a desired time-scaling factor, wherein the first channel contains data that is compressed using a compression process that provides highest

audio quality at the available bandwidth.” The combination of Ware and Levine clearly fails to disclose or suggest “a plurality of channels that represent the audio presentation after time-scaling by a desired time-scaling factor.”

As noted above, Ware discloses a system that performs on-the-fly time scaling of unscaled audio and fails to suggest a multi-channel data structure including channels representing audio after time scaling.

Levine does not mention time scaling and is instead directed to processes for encoding audio at a scalable data rate. In particular, Levine describes that “The parameters representing the three signal components compose a stream of compressed encoded audio data that can be further compressed so as to meet a specified transmission bandwidth limit by the deleting the least significant bits of quantized parameter values, reducing the update rates of parameters, and/or deleting the parameters used to encode higher frequency bands until the bandwidth of the compressed audio data meets the bandwidth requirement.” See the Abstract of Levine.

Ware and Levine separately and in combination fail to disclose a multi-channel data structure including “a plurality of channels that represent the audio presentation after time-scaling by a desired time-scaling factor” because neither reference suggest storing multiple channels representing an audio presentation after time scaling by a desired time scaling factor.

Claim 24 and claim 25, which depends from claim 24, are thus patentable over Ware and Levine, and Applicant requests reconsideration and withdrawal of this rejection under 35 U.S.C. § 103.

In summary, claims 1-36 were pending in the application. This response amends claims 19-24 and cancels non-elected claims 26-36. For the above reasons, Applicant respectfully requests allowance of the application including claims 1-25. Please contact the undersigned attorney at (408) 927-6700 if there are any questions concerning the application or this document.

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Respectfully submitted,



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